REMARKS/ARGUMENTS

Claims 1-21 are pending in the application. Reconsideration in view the following

remarks is respectfully requested. The Office Action also rejects claims 1-21 under 35

U.S.C. 103(a) as being unpatentable over Parady (U.S. Patent No. 5,933,627) in view of

Hennessy (Computer Organization and Design).

Applicants respectfully submit that none of the cited sections of Parady teach, suggest

or reflect at least "[a] method of handling operations in a multi-threaded processing system,

comprising determining if a stalled operation of a first thread is due to a loading of data from

a memory device *and flushing an instruction from said first thread from a pipeline of said*

processing system when data is to be loaded from said memory device before executing said

instruction" [as in claim 1].

Applicants would like to reiterate their concurrence with the current Office Action's

assertion on page 2, and similar assertions on pages 5, 8, and 10 that Parady *does not* disclose

flushing an instruction from said first thread from a pipeline of said processing system when

data is to be loaded from said memory device before executing such instruction.

However, on page 14 the Office Action proceeds to argue that Parady teaches, suggest

and discloses "...flushing an instruction from said first thread from a pipeline of said

processing system when data is to be loaded from said memory device before executing said

instuction" (e.g., as described in the embodiment of claim 1). Applicants are confused.

Nevertheless, Applicants will show that the Office Action's original position, that

Parady does not disclose flushing an instruction from said first thread from a pipeline of said

processing system when data is to be loaded from said memory device before executing said

instruction" was the correct one.

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The current Office Action states that Parady has shown in column 4, lines 45-51 an

embodiment where control is immediately transferred back to the thread that executed a load

when the data is ready before other threads can advance. This means that an instruction

about to be dispatched would have been flushed on a switch to a critical thread because data

is to be loaded for execution of an instruction in the critical thread before the flushed

instruction can execute.

Applicants respectfully disagree. Column 4, lines 45-51 state

Alternately, a particular thread could be identified as a critical thread, and generate an
interrupt as soon as the memory access is completed. The returned data from the load must be
provided to the appropriate register for the thread which requested it. This could be done by
using separate load buffers for each thread, or by storing a two bit tag in the load buffer
indicating the appropriate thread.

Therefore, the Parady reference merely discloses a critical thread's ability to generate an

interrupt after a memory access has been completed. The returned data is then sent to the

appropriate register. This section does not teach, suggest or disclose flushing an instruction

from said first thread from a pipeline of said processing system when data is to be loaded

from said memory device before executing said instruction, affirming the Office Action's

initial position pertaining to Paraday. Further, regardless of the Office Actions assertion of

what Parady reference really "means", it is very clear that the Paraday reference itself does

not disclose the claimed limitations. Such design characteristics as described in the

embodiment of claim 1 and argued above cannot be supplied by mere implication. Therefore,

since each and every limitations is not found in the cited references, the cited references

cannot be combined to adequately form the basis of a proper 35 U.S.C. §103(a) rejection of

independent claim 1. Independent claims 5, 10, and 16 contain substantively similar

limitations and therefore are also allowable for similar reasons. Claims 2-4, 6-9, 11-15 and

17-21 depend from allowable independent claims 1, 5, 10 and 16, and therefore are in

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condition for allowance as well. Furthermore, Applicants would like to reiterate it argument

that the two references cannot be combined without the use of impermissible hindsight
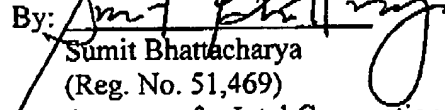
reasoning.

For at least the above reasons, Applicants respectfully submit that this application is

in condition for allowance. A Notice of Allowance is earnestly solicited.

The Examiner is invited to contact the undersigned at (408) 975-7500 to discuss any

matter concerning this application. The Office is hereby authorized to charge any additional

fees or credit any overpayments to Deposit Account No. **11-0600**.

Respectfully submitted,

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